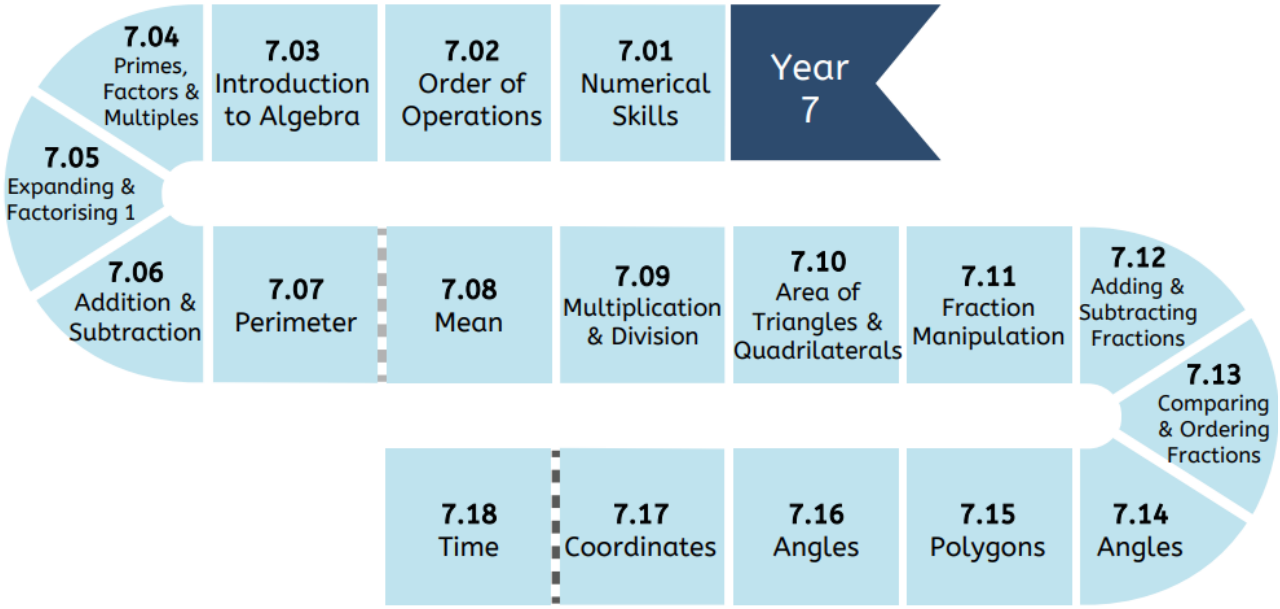
Holland Park School | ***Year 7 Maths***



Overview	Year 7 Topics 2024/2025
Assessment	Fortnightly Topic Assessment
Homework	Sparx Maths (set every Wednesday, due for following Wednesday)
Resources	Sparx Maths, Corbett Maths, Maths Genie
Key Terminology	Place value, integer, square number, square root, inequality, ascending, descending, estimate, round, operation, evaluate, indices, variable, term, coefficient, expression, factor, multiple, prime, expand, factorise, commutative, associative, perimeter, polygon, average, mean, median, mode, range, improper, equivalent, equilateral, scalene, isosceles, parallelogram, trapezium, rhombus, kite, acute, obtuse, reflex, degree, origin, vertical, horizontal, analogue, digital

Topics	Key content	Sparx Clips
7.01 Numerical Skills	Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.	M763, M704, M522, M527, M135, M111, M431, M878
7.02 Order of Operations	Solve calculations requiring understanding of B-I-D-M-AS (know that the inverse of squaring is 'square rooting')	M521

7.03 Introduction to Algebra	Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one-step rearranging, substitute positive and negative integers into expressions, and solve simple one-step equations. Substitute and solve.	M106, M830, M813, M795, M531, M417, M327, M208, M979
7.04 Prime, Factors and Multiples	Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple	M227, M823, M698, M322, M829
7.05 Expanding and Factorising	Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors	M288, M237, M792, M100
7.06 Addition and Subtraction	Use Addition and Subtraction, including formal written methods, applied to integers, decimals	M928, M429, M347, M152, M899
7.07 Perimeter	Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles)	M920, M635, M690
7.08 Mean	Describe, interpret and compare observed distributions of a single variable through the use of the mean	M940
7.09 Multiplication and Division	Use Multiplication and Division, including formal written methods, applied to integers & decimals	M113, M911, M187, M803, M462, M354, M873, M262
7.10 Area of triangles and quadrilaterals	Derive and apply formulae to calculate and solve problems involving area of triangles and quadrilaterals. Converting metric units of area.	M900, M390, M291, M610, M269, M996

7.11 Fraction Manipulation	Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1	M158, M410, M671, M939, M601
7.12 Adding and Subtracting Fractions	Use addition and subtraction, including formal written methods, applied to proper and improper fractions, and mixed numbers	M835, M931
7.13 Comparing and Ordering Fractions	Compare and order fractions by creating common denominators	M335, M958
7.14 Fractions of amounts	Interpret fractions as operators	M695
7.15 Polygons	Derive, describe and illustrate properties of triangles, quadrilaterals and other plane figures. Describe, sketch and draw regular polygons, and other polygons that are reflectively and rotationally symmetric example, equal lengths and angles using appropriate language and technologies	M276, M523
7.16 Angles	Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles	M502, M541, M780, M331, M818, M351, M679, M319
7.17 Coordinates	Read and plot coordinates in all 4 quadrants. Coordinates and developing algebraic relationships. Find midpoints. Understand how coordinates link to basic graphs of y=a, x=a, y=x and y=-x	M618
7.18 Time	Using clocks, converting between analogue and digital time, calculating with time, using timetables, using calendars, converting units of time.	M892, M627, M963, M747, M515